```
==============================================================
Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: Keisha Douglas
Timestamp: [year=2007; month=12; day=20; hr=17; min=9; sec=19; ms=477; ]
==============================================================
```

Application No: 10551176   Version No: 1.1

Input Set:

Output Set:

Started: 2007-12-20 17:08:17.338
Finished: 2007-12-20 17:08:17.671
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 333 ms
Total Warnings: 3
Total Errors: 0
No. of SeqIDs Defined: 5
Actual SeqID Count: 5

Error code   Error Description

W   213   Artificial or Unknown found in <213> in SEQ ID (3)

W   213   Artificial or Unknown found in <213> in SEQ ID (4)

W   213   Artificial or Unknown found in <213> in SEQ ID (5)

<110>   DeveloGen Aktiengesellschaft

<120>   USE OF A DG931 PROTEIN PRODUCT FOR PREVENTING AND TREATING DIABETES AND/OR OBESITY AND/OR
METABOLIC SYNDROME

<130>   85DG0102

<140>   10/551,176
<141>   2005-12-20

<150>   PCT/EP 2004/003417
<151>   2004-03-31

<150>   EP 03 007 274.8
<151>   2003-03-31

<160>   5

<170>   PatentIn version 3.1

<210>   1

<211>   4574

<212>   DNA

<213>   Homo sapiens

<400>   1
ggcggctgct cccattgagc tgtctgctcg ctgtgcccgc tgtgcctgct gtgcccgcgc   60

tgtcgccgct gctaccgcgt ctgctggacg cgggagacgc cagcgagctg gtgattggag   120

ccctgcggag agctcaagcg cccagctctg cccgaggagc ccaggctgcc ccgtgagtcc   180

catagttgct gcaggagtgg agccatgagc tgcgtcctgg gtggtgtcat ccccttgggg   240

ctgctgttcc tggtctgcgg atcccaaggc tacctcctgc ccaacgtcac tctcttagag   300

gagctgctca gcaaatacca gcacaacgag tctcactccc gggtccgcag agccatcccc   360

agggaggaca aggaggagat cctcatgctg cacaacaagc ttcggggcca ggtgcagcct   420

caggcctcca acatggagta catgacctgg gatgacgaac tggagaagtc tgctgcagcg   480

```
tgggccagtc agtgcatctg ggagcacggg cccaccagtc tgctggtgtc catcgggcag      540

aacctgggcg ctcactgggg caggtatcgc tctccggggt tccatgtgca gtcctggtat      600

gacgaggtga aggactacac ctacccctac ccgagcgagt gcaacccctg gtgtccagag      660

aggtgctcgg ggcctatgtg cacgcactac acacagatag tttgggccac caccaacaag      720

atcggttgtg ctgtgaacac ctgccggaag atgactgtct ggggagaagt ttgggagaac      780

gcggtctact ttgtctgcaa ttattctcca aaggggaact ggattggaga agcccctac      840

aagaatggcc ggccctgctc tgagtgccca cccagctatg gaggcagctg caggaacaac      900

ttgtgttacc gagaagaaac ctacactcca aaacctgaaa cggacgagat gaatgaggtg      960

gaaacggctc ccattcctga agaaaccat gtttggctcc aaccgagggt gatgagaccc     1020

accaagccca agaaaacctc tgcggtcaac tacatgaccc aagtcgtcag atgtgacacc     1080

aagatgaagg acaggtgcaa agggtccacg tgtaacaggt accagtgccc agcaggctgc     1140

ctgaaccaca aggcgaagat ctttggaact ctgttctatg aaagctcgtc tagcatatgc     1200

cgcgccgcca tccactacgg gatcctggat gacaagggag gcctggtgga tatcaccagg     1260

aacgggaagg tccccttctt cgtgaagtct gagagacacg gcgtgcagtc cctcagcaaa     1320

tacaaacctt ccagctcatt catggtgtca aaagtgaaag tgcaggattt ggactgctac     1380

acgaccgttg ctcagctgtg cccgtttgaa aagccagcaa ctcactgccc aagaatccat     1440

tgtccggcac actgcaaaga cgaaccttcc tactgggctc cggtgtttgg aaccaacatc     1500

tatgcagata cctcaagcat ctgcaagaca gccgtgcacg cgggagtcat cagcaacgag     1560

agtgggggtg acgtggacgt gatgcccgtg gataaaaaga gacctacgt gggctcgctc     1620

aggaatggag ttcagtctga aagcctgggg actcctcggg atggaaaggc cttccggatc     1680

tttgctgtca ggcagtgaat ttccagcacc aggggagaag gggcgtcttc aggagggctt     1740

cggggttttg cttttatttt tattttgtca ttgcggggta tatggagagt caggaaactt     1800

cctttgactg atgttcagtg tccatcactt tgtggcctgt gggtgaggtg acatctcatc     1860

ccctcactga agcaacagca tcccaaggtg ctcagccgga ctccctggtg cctgatcctg     1920

ctgggcccg ggggtctcca tctggacgtc ctctctcctt tagagatctg agctgtctct     1980

taaaggggac agttgcccaa aatgttcctt gctatgtgtt cttctgttgg tggaggaagt     2040

tgatttcaac ctccctgcca aaagaacaaa ccatttgaag ctcacaattg tgaagcattc     2100

acggcgtcgg aagaggcctt ttgagcaagc gccaatgagt ttcaggaatg aagtagaagg     2160

tagttatttа aaaataaaaa acacagtccg tccctaccaa tagaggaaaa tggtttaat     2220
```

```
gtttgctggt cagacagaca aatgggctag agtaagaggg ctgcgggtat gagagacccc   2280

ggctccgccc tggcacgtgt ccttgctggc ggcccgccac aggcccccectt caatggccgc   2340

attcaggatg gctctataca cagcagtgct ggtttatgta gagttcagca gtcacttcag   2400

agatgtatct tgtctttgtc aggcccttca tcttcatggc ccacctgttt tctgccgtga   2460

cctttggtcc cattgaggac taaggatcgg gacccttttct ttaccccccta cccattgtgg   2520

ctcccaccct gcctcggact ggtttacgtg tcctggttca cacccaggac ttttctttgc   2580

aagcgaacct gtttgaagcc caagtcttaa ctcctggtct cgtaaggttc cactgagacg   2640

agatgtctga gaacaaccaa agaaggcctg ctctttgctg ctttttaaaaa atgacaatta   2700

aatgtgcaga ttccccacgc acccgatgac ctattttttc agccgtggga ggaatggagt   2760

ctttggtaca ttcctcaccg aggttagcag ctcagtttgt ggttatgaaa ccgtctgtgg   2820

cctcatgaca gcgagagatg ggaatacact agaaggatct cttttcctgt tttcgtgaaa   2880

cgactcttgc caaacgttcc cgaggcgcca aggagtgtag tacaccctgg ctgccatcac   2940

tctataaaag tgcttcatga gcccagacca aaagcccaca gtgaaatgaa gtaccctttt   3000

gtaaatagca ttttttttgca gaaggtgaaa attccactct ctaccaccgg gccagccaat   3060

agatcacttt ggtgaatgct agtttcaaat ttgattcaaa atatttctta ggtgaaagaa   3120

ctagcagaaa gtcaaaaact aagatactgt agactggaca agaaattcta cctgggcacc   3180

taggtgatgc cttctttctt tgattgcctt tctaataaat gcagaatctg aaggtaaata   3240

ggtttaaaac aaaacaaaaa cccaccccctt taaggagttg gtaaaaagca gttcaactct   3300

tagcttgact gagctaaaat tcacaggact acgtgctttg tgcattgtag tctagtcgta   3360

attcataggt actgactcct cagccccaaa tgtcggagag gaagaattcg gtcagcctgt   3420

caggtcgtga gtccagttac caccaaacat ctgggaaact tctgggtgct gggtgctctg   3480

ctgctggact tttgtggctg tgtctgtgtc tgcaagataa attagatcgc cctgtggggt   3540

ttgcagaatt agtgaagggt ccaggacgat cccagtgggc tcgcttccaa agcatcccac   3600

tcaagggaga cttgaaactt ccagtgtgag ttgaccccat catttaaaaa taaagtcccc   3660

gggttcctta atgcctcctt cactgggcct tcctagcagg atagaaagtc cttgcccaga   3720

gcaggacctg gctgtctttt ttttttttt tttcccgaga ccaagtttca ctctgttgcc   3780

caaggtagag tgcagtggcg tgatctctgc tcattgcaac tgccgcctcc cgggttcaag   3840

caattctcat gcatcagcct cccaagtacc tgggactaca ggcgtgagct accatgcccg   3900
```

```
gctaatttt  gtattttttag  tagagatggg  gtttcattat  gttggccagg  ctggtctcga      3960

actccttacc  tcaggtgatc  cacccacctt  ggcctcccga  agtgctggga  ttacaggcat      4020

gagccactgc  gcccggccat  ggacctggct  gtctttatca  tccccacaaa  cattttgaaa      4080

ctggaatatt  tgtcttcaga  aaatggaaac  aagactataa  atgataagcc  ctgtccctag      4140

caccacctct  cctgtgtgtg  gaatagaggc  ccctcgtgct  accaacactt  accctgtgtt      4200

taaaaagatc  ttgtaccaag  ccaacggcgt  tcctggctct  cctgcccaca  ggatgaacat      4260

tttcggcttc  cttaggagtt  ttgccctacc  gtattccaaa  gcgtgtgctg  gtttctcata      4320

ttgtctgtag  gctcactcag  cccgcagttt  atgtgtgtgc  ttttttctat  gaaaaatgat      4380

gtattttgct  acttcctgtg  tacaaagttt  tattgtaaat  gttttttgtg  ctttgcatga      4440

acaggggcca  cgttgttgca  attgtttcag  tagaactggt  ttgatttcta  aaatgttcct      4500

gtaacatatc  ttttatgaac  aaatctgaac  aatttgtgaa  ataaacatt  gaaaccaaa      4560

aaaaaaaaaa  aaaa                                                            4574


<210>  2

<211>  497

<212>  PRT

<213>  Homo sapiens


<400>  2

Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe Leu
1               5                   10                  15


Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu Leu Glu
            20                  25                  30


Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser Arg Val Arg
        35                  40                  45


Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu Met Leu His Asn
    50                  55                  60


Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser Asn Met Glu Tyr Met
65                  70                  75                  80
```

Thr Trp Asp Asp Glu Leu Glu Lys Ser Ala Ala Ala Trp Ala Ser Gln
            85   90   95

Cys Ile Trp Glu His Gly Pro Thr Ser Leu Leu Val Ser Ile Gly Gln
            100   105   110

Asn Leu Gly Ala His Trp Gly Arg Tyr Arg Ser Pro Gly Phe His Val
            115   120   125

Gln Ser Trp Tyr Asp Glu Val Lys Asp Tyr Thr Tyr Pro Tyr Pro Ser
    130   135   140

Glu Cys Asn Pro Trp Cys Pro Glu Arg Cys Ser Gly Pro Met Cys Thr
145   150   155   160

His Tyr Thr Gln Ile Val Trp Ala Thr Thr Asn Lys Ile Gly Cys Ala
            165   170   175

Val Asn Thr Cys Arg Lys Met Thr Val Trp Gly Glu Val Trp Glu Asn
            180   185   190

Ala Val Tyr Phe Val Cys Asn Tyr Ser Pro Lys Gly Asn Trp Ile Gly
            195   200   205

Glu Ala Pro Tyr Lys Asn Gly Arg Pro Cys Ser Glu Cys Pro Pro Ser
    210   215   220

Tyr Gly Gly Ser Cys Arg Asn Asn Leu Cys Tyr Arg Glu Glu Thr Tyr
225   230   235   240

Thr Pro Lys Pro Glu Thr Asp Glu Met Asn Glu Val Glu Thr Ala Pro
            245   250   255

Ile Pro Glu Glu Asn His Val Trp Leu Gln Pro Arg Val Met Arg Pro
            260   265   270

Thr Lys Pro Lys Lys Thr Ser Ala Val Asn Tyr Met Thr Gln Val Val
            275   280   285

Arg Cys Asp Thr Lys Met Lys Asp Arg Cys Lys Gly Ser Thr Cys Asn
    290   295   300

Arg Tyr Gln Cys Pro Ala Gly Cys Leu Asn His Lys Ala Lys Ile Phe

Gly Thr Leu Phe Tyr Glu Ser Ser Ser Ile Cys Arg Ala Ala Ile
            325   330   335

His Tyr Gly Ile Leu Asp Asp Lys Gly Gly Leu Val Asp Ile Thr Arg
            340   345   350

Asn Gly Lys Val Pro Phe Phe Val Lys Ser Glu Arg His Gly Val Gln
            355   360   365

Ser Leu Ser Lys Tyr Lys Pro Ser Ser Ser Phe Met Val Ser Lys Val
    370   375   380

Lys Val Gln Asp Leu Asp Cys Tyr Thr Thr Val Ala Gln Leu Cys Pro
385   390   395   400

Phe Glu Lys Pro Ala Thr His Cys Pro Arg Ile His Cys Pro Ala His
            405   410   415

Cys Lys Asp Glu Pro Ser Tyr Trp Ala Pro Val Phe Gly Thr Asn Ile
            420   425   430

Tyr Ala Asp Thr Ser Ser Ile Cys Lys Thr Ala Val His Ala Gly Val
            435   440   445

Ile Ser Asn Glu Ser Gly Gly Asp Val Asp Val Met Pro Val Asp Lys
    450   455   460

Lys Lys Thr Tyr Val Gly Ser Leu Arg Asn Gly Val Gln Ser Glu Ser
465   470   475   480

Leu Gly Thr Pro Arg Asp Gly Lys Ala Phe Arg Ile Phe Ala Val Arg
            485   490   495

Gln

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> mouse DG931 forward primer

<400> 3
cagtcatcaa cttcatgacc caag   24

<210> 4

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> mouse DG931 reverse primer

<400> 4
ctgttacacg tggatccttt gc   22

<210> 5

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> mouse DG931 Taqman probe

<400> 5
tccactgtga caccaagatg aaggactca   29